



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,412	07/08/2003	Alan R. Atemboski	243148001US3	9294

25096 7590 08/14/2006

PERKINS COIE LLP

PATENT-SEA

P.O. BOX 1247

SEATTLE, WA 98111-1247

EXAMINER

PRICE, CARL D

ART UNIT

PAPER NUMBER

3749

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/616,412

Applicant(s)

ATEMBOSKI ET AL.

Examiner

CARL D. PRICE

Art Unit

3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 46-146 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 46-146 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims **46-146** have been considered but are moot in view of the new ground(s) of rejection.

Applicant has amended the claims to be of a scope not previously considered. Consistent with applicant's argument that the prior art relied on in the previous office action fail to show, disclose and/or teach certain aspects of applicant's invention now recited in the claims filed on **05/16/2006**, applicant has amended the claims to include for example the following:

(Independent claims 46 and 70):

"...the first set of gas distribution apertures and the first recessed gas distribution chamber portion being configured to provide a first flow rate of fuel gas through the burner body for ignition and a first flame characteristic, and the second set of gas distribution apertures and the second recessed gas distribution chamber portion being configured to provide a second flow rate of fuel gas through the burner body for ignition and a second flame characteristic different from the first flame characteristic; and ..."

(Independent claim 50):

"... , and the contoured surface having a substantially flat portion forming a simulated-log-support surface adjacent to the simulated coal members, the simulated-log-support surface having guide means, ..."; and

"... the guide means being configured to align the simulated-log relative to the upper portion of the burner body."

(Independent claim 119):

"... for use with a simulated log and for burning a fuel gas from a gas source, comprising: ...";

"... the burner body configured to support the simulated log on the contoured surface and ..."; and

“ ... when the fuel gas is ignited adjacent to the upper surface and the simulated log, to provide flames that move about to the contoured upper surface and the simulated log in a manner that simulates a natural wood-burning fire. (see similar changes in Independent claim 122).

The amendment of claim 46 fails to define the invention over the prior art of record. As stated in the rejection of the claims herein below, it is noted that **GB002334328 (SHIMEK et al)** because the apertures of the first set of apertures and the second set of apertures are differently distributed along the gas supply manifold and differ in number the flow rate of fuel flowing through respectively by the first set and second set of apertures would necessarily be different and any flame(s) produced by the first set of apertures would necessarily be characteristically different from any flame(s) produced by the second set of apertures.

Also, in response to applicant's arguments against the references of **GB002334328 (SHIMEK et al)**, **GB002068106 (ROSIEK et al)** and **GB002035545 (PALAU)**, individually, one cannot show nonobviousness by attacking the references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that the proposed combination of teachings of **GB002334328 (SHIMEK et al)** in view of **GB002068106 (ROSIEK et al)** and **GB002035545 (PALAU)** “*would destroy the intended purpose of the dual-purpose indoor/outdoor portable gas burner of Shimek ‘328*” apparently because “*the flame pattern is not suitable just for a fireplace*” since, as suggested by applicant the flame pattern of Shimek ‘328 “*is suitable for use in a fireplace, or as a campfire, or as a cooking grill*”. The Examiner can not agree with applicant’s argument since whether or not the non-metallic ceramic burner body upper portion of **GB002334328 (SHIMEK et al)** is formed to include a flat lower portion or bottom surface, distribution apertures positioned in a plurality of planes and spacing, a peak and trough contoured profile, and/or materials that glow at selected color variations, to bring about shades of varying brightness as a result of the temperature difference in the burner for the purpose of producing the simulated realistic effect of a hot real fuel bed, in the manner taught by

Art Unit: 3749

GB002068106 (ROSIEK ET AL) and **GB002035545 (PALAU)**, would have no adverse affect on the operation of **GB002334328 (SHIMEK et al)** when, used in a fireplace, or as a campfire, or as a cooking grill

Would have no bearing on the actual and intended operation of **GB002334328 (SHIMEK et al)** in either “fireplaces and/or campfires” since the proposed modification is directed to further realistic decorative and aesthetic enhancements of the surface of the burner body consistent with the intended operation of **GB002334328 (SHIMEK et al)** as an artificial or imitation gas fire, and having no affect on the ability of one to transport and use the burner “for cooking and/or heating and/or grilling as the need may arise”. In this regard, it is noted that such a modification is not outside of the original intent of **GB002334328 (SHIMEK et al)** which itself suggests forming the burner body with a “three dimensional contoured surface in the ceramic fiber”. Also, in this regard, applicant is reminded the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

The prior art reference of **FR002629178 (ARRIBAS)**(of record) is now relied on to address the amendments made to independent claim 50 requiring the contoured surface to have a substantially flat portion forming a simulated-log-support surface adjacent to the simulated coal members, the simulated-log-support surface having guide means, or member, being configured to align the simulated-log relative to the upper portion of the burner body. See below.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the

time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

The examiner disagrees with applicant's argument that **GB002334328 (SHIMEK et al)** fails to show or teach a spacer. As noted in the Examiner's detailed rejection of the claims it is noted that **GB002334328 (SHIMEK et al)** teaches applying a gasket forming silicon adhesive (25) positioned between the burner body (12) and base (11, 11A; "a bead of adhesive is applied around the manifold area close to the outside perimeter of the top unit"). That is, the gasket forming silicon adhesive, necessarily having a given thickness, of **GB002334328 (SHIMEK et al)** is the structural and functional equivalent to applicant broadly claimed "spacer". In this regard it is noted that in the response filed on **05/16/2006** applicant argues that *"Regarding the claim language "spacer", applicants further submit that the specification, including the drawings as originally filed provide clear support for the claim language. As an example, Figure 3 clearly shows gasket 26 that supports the burner body and spaces the burner body above the burner pan. In this embodiment, the gasket has a sufficient thickness so as to be a spacer."*

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim **50** rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 50, the word "means" is preceded by the word(s) "guide" (line 10) in an attempt to use a "means" clause to recite a claim element as a means for performing a specified function. However, since no function is specified by the word(s) preceding "means," it is impossible to determine the equivalents of the element, as required by 35 U.S.C. 112, sixth paragraph. See *Ex parte Klumb*, 159 USPQ 694 (Bd. App. 1967).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

With regard to all following rejections based on prior art, the recitations such as ***"being connectable to a base with a gas inlet aperture therein"*** (e.g. - claims 46 and 87) has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Also, in regard to the following rejections based on prior art, recitations such as ***"sealably coupeable"*** (e.g. - claim 1, line 5), are deemed recitations of the intended use of the claimed invention which do not result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as

Art Unit: 3749

compared to the prior art. See *In re Casey*, 370 F.2d 576, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963).

Claims: Rejected under 35 U.S.C. 103

Claims **50-54** are rejected under 35 U.S.C. 103(a) as being unpatentable over **FR002629178 (ARRIBAS)**(of record) in view of **GB002334328 (SHIMEK et al)**, **GB002068106 (ROSIEK et al)** and **GB002035545 (PALAU)**.

FR002629178 (ARRIBAS) shows and discloses a non-metallic ceramic fiber (see page 2, lines 19-30) burner body having a lower portion or surface (at 14; figure 3,4) and an upper contoured portion or surface (2a, 2b, 3a, 3b) have a substantially flat portion (3, 3a) forming a simulated-log-support surface adjacent to simulated coal members (3a; figure 2), the simulated-log-support surface having guide members (19) being configured to align simulated-logs (2a,b)) relative to the upper portion of the burner body. The non-metallic ceramic burner body lower portion (13; Figure 9) of the burner body sealably coupled to a base (3c). It is further noted that the apertures of the first set of apertures and the second set of apertures are differently distributed (i.e. – See figure 3 showing a mirror image orientation of the longer and shorter passages (5,6)) relationship along the gas supply manifold therefore the separate recessed manifold portions (4) of would necessarily be different and any flame(s) produced by the first set of apertures **FR002629178 (ARRIBAS)** would necessarily be characteristically different flame(s).

FR002629178 (ARRIBAS) also shows and discloses combustion air holes (16) passing through the burner body (3,3b) and arranged out of fluid communication with the gas distribution chamber (4).

The flame ports (5, 6) of **FR002629178 (ARRIBAS)** are arranged to permit the flames to move along the contoured surface of the simulated fuel features.

Art Unit: 3749

GB002334328 (SHIMEK et al) show (Figures 1, 2, 4, 5, 9) and discloses (see page 8, line 21 - page 9, line 13) a burner assembly for burning a fuel gas from a gas source (17) including:

- a base (11, 11A) with a gas inlet aperture (14);
- a burner body including:
 - an non-metallic ceramic burner body upper portion (12; i.e. -“ceramic fiber top”);
 - a non-metallic ceramic burner body lower portion (13; Figure 9) of the burner body sealably coupled (i.e.- “a bead of adhesive is applied around the manifold area close to the outside perimeter of the top unit”) to the base and having an “H-shaped” gas manifold area (at 13; Figure 9) with first (not referenced; e.g. – any one portion of the H-shaped manifold area) and second (not referenced; e.g. – any one portion of the H-shaped manifold area) recessed (see page 9, lines 3-6; i.e. – “It will be understood that the H-shaped area is **recessed** into the ceramic fiber top 12 and provides the aforementioned and described hollow manifold 13”) gas distribution chamber portions formed therein;
- a first set (5) of the gas distribution apertures extending through the burner body to a first recessed gas distribution chamber portion (4);
- a second set (6) of distribution apertures extending through the burner body to the second recessed gas distribution chamber portion (4);
- a spacer contacting and therefore adjacent to the base (not referenced; i.e. – the downward extending perimeter portion adhesively bonded (25) to the base (11, 11A) and forming the sealed recessed gas manifold area (13));
- a gasket forming silicon adhesive (25) positioned between the burner body (12) and base (11, 11A);
- the upper portion of the burner body having a contoured surface (i.e. – “The novel gas burner unit is provided with a three dimensional contoured surface in the ceramic fiber top and a pattern of burner jets extending through the ceramic fiber top into the gas manifold for creating a desired gas flame pattern”; see page 3, lines 7-11) with a plurality of integral peaks and valleys(see Figures 1, 2, 4, 5, 9), the contoured surface being;

Art Unit: 3749

- as distribution apertures (24) extending from the lower portion to the contoured surface wherein the;
- a first set of the gas distribution apertures extending through the burner body to the first recessed gas distribution chamber portion (i.e. – that portion of the ceramic matrix communicating with a respective one of the recessed portions of the H-shaped manifold recess);
- a second set of distribution apertures extending through the burner body to the second recessed gas distribution chamber portion (i.e. – that portion of the ceramic matrix communicating with a respective other one of the recessed portions of the H-shaped manifold recess);
- a smaller intermediate chamber portion (not referenced; i.e. – the smaller chamber portion bridging the adjacent parallel and relatively longer chamber portions of the “H-shaped” manifold (13; figure 9);
- wherein the gas distribution apertures are positioned to direct a flow of the fuel gas to the contoured upper surface for ignition; and
- a simulated log (see claim 14) supported adjacent to the simulated ember bed.

It is further noted that the H-shaped manifold (13; figure 9) shows the first set and second set of apertures to be randomly positioned along the surface of their respective manifold H-shaped manifold sections. It is further noted that the number of apertures in the first set is shown to be different from the number of apertures of the second set. Because the apertures of the first set of apertures and the second set of apertures are differently distributed along the gas supply manifold and differ in number the flow rate of fuel flowing through respectively by the first set and second set of apertures would necessarily be different and any flame(s) produced by the first set of apertures would necessarily be characteristically different from any flame(s) produced by the second set of apertures.

FR002629178 (ARRIBAS) discloses the invention substantially as set forth in the claims with possible exception to:

- the contoured surface shaped to simulate a plurality of coal/ember members arranged in a simulated ember bed; and the burner body being sealed, such as with and adhesive, to the burner base.

GB002068106 (ROSIEK ET AL) teaches, from the same solid fuel effect gas fire field of endeavor as **GB002334328 (SHIMEK et al)**, providing a non-metallic ceramic burner body with gas distribution apertures (3) extending from a flat lower portion or undersurface to a contoured upper portion or surface (4', 4'') of a plate-like member; wherein the contoured surface is shaped to simulate a plurality of coal/ember members arranged in a simulated ember bed and defines a plurality of integral peaks (6) and valleys (7). **GB002068106 (ROSIEK ET AL)** discloses the spacing of peaks (6) and troughs (7) are arranged to "ensure the hot fuel bed simulation" (see page 3, line 2), and an appearance of burning fuel is produced by "hot wispy flames around the coal and/or log elements (4, 4') to thus enhance the realism of the fire" (see page 3, lines 13-14). In this regard, it is noted that the phrase "realism of the fire" would necessarily be understood by a person having ordinary skill in the art of solid fuel effect, or simulated, gas fires to be glowing at selected color variations since it is well known that color variations are necessarily displayed in real solid fuel fires. **GB002068106 (ROSIEK ET AL)** also discloses (page 3, lines 27-34) that the log and/or coal elements 4, 4' are coated with solid organic material or impregnated or made with materials to produce selected color variations obtained from real fuel fires. **GB002068106 (ROSIEK ET AL)** shows gas aperture outlets at a plurality of different planes and different spacing (see figure 4).

GB002035545 (PALAU) teaches, from the same solid fuel effect gas fire field of endeavor as **GB002334328 (SHIMEK et al)**, providing a burner body with gas distribution apertures (3) extending from a flat lower portion or undersurface to a contoured upper portion or top surface (12) wherein the contoured surface is shaped to simulate a plurality of coal/ember members arranged in a simulated ember bed. **GB002035545 (PALAU)** acknowledges (see page 1, lines 77-98) that the result of the contoured surface is to produce "shades of varying brightness as a result of the temperature difference" wherein the colors vary "from bright red at the

Art Unit: 3749

periphery of protuberances 12 to near-black in the most central region of the protuberance, resulting in the optical effects similar to burning logs.

In regard to claims in regard to claim **50-54**, to bring about shades of varying brightness as a result of the temperature difference in the burner for the purpose of producing the simulated realistic effect of a hot real fuel bed, it would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to construct the non-metallic ceramic burner body upper portion of **FR002629178 (ARRIBAS)** to include a flat lower portion or bottom surface, distribution apertures positioned in a plurality of planes and spacing, a peak and trough contoured profile, and/or materials that glow at selected color variations, in view of the teachings of **GB002068106 (ROSIEK ET AL)** and **GB002035545 (PALAU)**. Also, for the purpose of sealing the upper and base portions of the **FR002629178 (ARRIBAS)** burner assembly, it would have been obvious to a person having ordinary skill in the art to seal the two members together such as with an adhesive, in view of the teaching of **GB002334328 (SHIMEK et al)**. In regard to claim 52, Official Notice is taken that vermiculite is a well known suitable refractory material (see for example GB002275331A; US003284209; GB002258723A) used in forming simulated fires. Therefore, in view of that which is well known in the art, it would have been obvious to a person having ordinary skill in the art to form the burner element from vermiculite. With regard to the burner body being formed of "compressed" material, the recitation "compressed" is deemed a method or process limitation which can be given no patentable weight in the process claim. In regard to claim 54, to form the gas distribution chamber (4) of **FR002629178 (ARRIBAS)** to have first and second chamber portions where one chamber portion has a greater number of flame apertures for the purpose of creating a varied flame effect, would have been obvious to a person having ordinary skill in the art in view of the teaching of **GB002334328 (SHIMEK et al)**.

Claims: Rejected under 35 U.S.C. 103

Claims 46-49, 55, 56, 58, 59, 61-75, 79-92, 94-96, 98-104, 106-125, 128-135, 139-146, are rejected under 35 U.S.C. 103(a) as being unpatentable over **GB002334328 (SHIMEK et al)** in view of **GB002068106 (ROSIEK et al)** and **GB002035545 (PALAU)** and **FR002629178 (ARRIBAS)**.

GB002334328 (SHIMEK et al) show (Figures 1, 2, 4, 5, 9) and discloses (see page 8, line 21 - page 9, line 13) a burner assembly for burning a fuel gas from a gas source (17) including:

- a base (11, 11A) with a gas inlet aperture (14);
- a burner body including:
 - an non-metallic ceramic burner body upper portion (12; i.e. -“ceramic fiber top”);
 - a non-metallic ceramic burner body lower portion (13; Figure 9) of the burner body sealably coupled (i.e.- “a bead of adhesive is applied around the manifold area close to the outside perimeter of the top unit”) to the base and having an “H-shaped” gas manifold area (at 13; Figure 9) with first (not referenced; e.g. – any one portion of the H-shaped manifold area) and second (not referenced; e.g. – any one portion of the H-shaped manifold area) recessed (see page 9, lines 3-6; i.e. – “It will be understood that the H-shaped area is recessed into the ceramic fiber top 12 and provides the aforementioned and described hollow manifold 13”) gas distribution chamber portions formed therein;
- a spacer contacting and therefore adjacent to the base (not referenced; i.e. – the downward extending perimeter portion adhesively bonded (25) to the base (11, 11A) and forming the sealed recessed gas manifold area (13));
- a gasket and spacer forming silicon adhesive (25) positioned between the burner body (12) and base (11, 11A);
- the upper portion of the burner body having a contoured surface (i.e. – “The novel gas burner unit is provided with a three dimensional contoured surface in the ceramic fiber top and a pattern of burner jets extending through the ceramic fiber top into the gas manifold for creating a desired gas flame pattern”; see page 3, lines 7-11) with a

Art Unit: 3749

plurality of integral peaks and valleys(see Figures 1, 2, 4, 5, 9), the contoured surface being;

- as distribution apertures (24) extending from the lower portion to the contoured surface wherein the;
- a first set of the gas distribution apertures extending through the burner body to the first recessed gas distribution chamber portion (i.e. – that portion of the ceramic matrix communicating with a respective one of the recessed portions of the H-shaped manifold recess);
- a second set of distribution apertures extending through the burner body to the second recessed gas distribution chamber portion (i.e. – that portion of the ceramic matrix communicating with a respective other one of the recessed portions of the H-shaped manifold recess);
- a smaller intermediate chamber portion (not referenced; i.e. – the smaller chamber portion bridging the adjacent parallel and relatively longer chamber portions of the “H-shaped” manifold (13; figure 9).
- wherein the gas distribution apertures are positioned to direct a flow of the fuel gas to the contoured upper surface for ignition; and
- a simulated log (see claim 14) supported adjacent to the simulated ember bed.

It is further noted that the H-shaped manifold (13; figure 9) shows the first set and second set of apertures to be randomly positioned along the surface of their respective manifold H-shaped manifold sections. It is further noted that the number of apertures in the first set is shown to be different from the number of apertures of the second set. Because the apertures of the first set of apertures and the second set of apertures are differently distributed along the gas supply manifold and differ in number the flow rate of fuel flowing through respectively by the first set and second set of apertures would necessarily be different and any flame(s) produced by the first set of apertures would necessarily be characteristically different from any flame(s) produced by the second set of apertures.

GB002334328 (SHIMEK et al) discloses the invention substantially as set forth in the claims with possible exception to:

- the contoured surface shaped to simulate a plurality of coal/ember members arranged in a simulated ember bed.

GB002068106 (ROSIEK ET AL) teaches, from the same solid fuel effect gas fire field of endeavor as **GB002334328 (SHIMEK et al)**, providing a non-metallic ceramic burner body with gas distribution apertures (3) extending from a flat lower portion or undersurface to a contoured upper portion or surface (4', 4'') of a plate-like member; wherein the contoured surface is shaped to simulate a plurality of coal/ember members arranged in a simulated ember bed and defines a plurality of integral peaks (6) and valleys (7). **GB002068106 (ROSIEK ET AL)** discloses the spacing of peaks (6) and troughs (7) are arranged to "ensure the hot fuel bed simulation" (see page 3, line 2), and an appearance of burning fuel is produced by "hot wispy flames around the coal and/or log elements (4, 4') to thus enhance the realism of the fire" (see page 3, lines 13-14). In this regard, it is noted that the phrase "realism of the fire" would necessarily be understood by a person having ordinary skill in the art of solid fuel effect, or simulated, gas fires to be glowing at selected color variations since it is well known that color variations are necessarily displayed in real solid fuel fires. **GB002068106 (ROSIEK ET AL)** also discloses (page 3, lines 27-34) that the log and/or coal elements 4, 4' are coated with solid organic material or impregnated or made with materials to produce selected color variations obtained from real fuel fires. **GB002068106 (ROSIEK ET AL)** shows gas aperture outlets at a plurality of different planes and different spacing (see figure 4).

GB002035545 (PALAU) teaches, from the same solid fuel effect gas fire field of endeavor as **GB002334328 (SHIMEK et al)**, providing a burner body with gas distribution apertures (3) extending from a flat lower portion or undersurface to a contoured upper portion or top surface (12) wherein the contoured surface is shaped to simulate a plurality of coal/ember members arranged in a simulated ember bed. **GB002035545 (PALAU)** acknowledges (see page 1, lines 77-98) that the result of the contoured surface is to produce "shades of varying brightness as a result of the temperature difference" wherein the colors vary "from bright red at the

periphery of protuberances 12 to near-black in the most central region of the protuberance, resulting in the optical effects similar to burning logs.

FR002629178 (ARRIBAS) shows and discloses a non-metallic ceramic fiber (see page 2, lines 19-30) burner body having a lower portion or surface (at 14; figure 3,4) and an upper contoured portion or surface (2a, 2b, 3a, 3b) have a substantially flat portion (3, 3a) forming a simulated-log-support surface adjacent to simulated coal members (3a; figure 2), the simulated-log-support surface having guide members (19) being configured to align simulated-logs (2a,b) relative to the upper portion of the burner body. The non-metallic ceramic burner body lower portion (13; Figure 9) of the burner body sealably coupled to a base (3c). It is further noted that the apertures of the first set of apertures and the second set of apertures are differently distributed (i.e. – See figure 3 showing a mirror image orientation of the longer and shorter passages (5,6)) relationship along the gas supply manifold therefore the separate recessed manifold portions (4) of would necessarily be different and any flame(s) produced by the first set of apertures **FR002629178 (ARRIBAS)** would necessarily be characteristically different flame(s).

In regard to claims **46-49, 55, 56, 58, 59, 61-75, 79-92, 94-96, 98-104, 106-125, 128-135, 139-146**, to bring about shades of varying brightness as a result of the temperature difference in the burner for the purpose of producing the simulated realistic effect of a hot real fuel bed, it would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to construct the non-metallic ceramic burner body upper portion of **GB002334328 (SHIMEK et al)** to include a flat lower portion or bottom surface, distribution apertures positioned in a plurality of planes and spacing, a peak and trough contoured profile, and/or materials that glow at selected color variations, in view of the teachings of **GB002068106 (ROSIEK ET AL)**, **GB002035545 (PALAU)** or **FR002629178 (ARRIBAS)**. In regard to claims **46** and **70**, because the apertures of the first set of apertures and the second set of apertures are differently distributed along the gas supply manifold and differ in number the flow rate of fuel flowing through respectively by the first set and second set of apertures would necessarily be different and any flame(s) produced by the first set of apertures would necessarily be characteristically different from any flame(s) produced by the second set of apertures. In

regard to claim 119, for the purpose of further enhancing the decorative and aesthetic effect of the simulated burning log effect, it would have been obvious to a person having ordinary skill in the art to modify flame ports to of **GB002334328 (SHIMEK et al)** to permit the flames to move along the contoured surface of the simulated fuel features, in view of the teaching of **FR002629178 (ARRIBAS)**.

Claims: Rejected under 35 U.S.C. 103

Claims **60, 78, 93, 126, 127** and **136-138**, are rejected under 35 U.S.C. 103(a) as being unpatentable over **GB002334328 (SHIMEK et al)** in view of **GB002068106 (ROSIEK et al)** and **GB002035545 (PALAU)** and **FR002629178 (ARRIBAS)**, as applied to claims **55, 73, 87, 94** and **135** respectively above, and further in view of **US005941237 (SHIMEK et al)** or **US004726351 (WHITTAKER et al)**.

GB002334328 (SHIMEK et al) show and discloses the invention substantially as set forth in the claims with possible exception to:

- the solid fuel effect gas fire burner bodies with combustion air holes extending there through and out of fluid communication with a fuel gas distribution chamber for providing an additional non-fuel mixed air supply to the flame area in order to aid in the formation of flickering or realistic looking flames.

Each of **US005941237 (SHIMEK et al)** and **US004726351 (WHITTAKER et al)** teach, from the same solid fuel effect gas fire field of endeavor as **GB002334328 (SHIMEK et al)**, providing solid fuel effect gas fire burner bodies with combustion air holes extending there through and out of fluid communication with a fuel gas distribution chamber. In particular:

US005941237 (SHIMEK et al) (see figure 17) provides a non-metallic ceramic burner solid fuel effect gas fire burner body (14), including apertures (63) and recessed portion (62), with combustion air holes (65) extending there through and out of fluid communication with a fuel gas distribution chamber.

US004726351 (WHITTAKER et al) provides (see figure 4) solid fuel effect gas fire burner body, including unevenly spaced, sized and distributed apertures (37C, 37D) and recessed portions (36, 37), with combustion air holes (38) extending there through and out of fluid communication with spaced (36, 37) and intermediate (note that gas manifold (37) has restrict, or smaller, passages formed adjacent to air holes (38)) communicating a fuel gas distribution portions.

In regard to claims **60, 78, 93, 97, 126, 127** and **136-138**, for the purpose of providing additional non-fuel mixed air supply to the flame area in order to aid in the formation of flickering or realistic looking flames, it would have been obvious to a person having ordinary skill in the art at the time of the claimed invention to modify the burner body of **GB002334328 (SHIMEK et al)** to include air holes arranged in the manner set forth in applicant's claims, in view of the teaching of **US005941237 (SHIMEK et al)** or **US004726351 (WHITTAKER et al)**.

Claims 57, 76, 77, 105: Rejected under 35 U.S.C. 103

Claims **57, 76, 77** and **105**, are rejected under 35 U.S.C. 103(a) as being unpatentable over **GB002334328 (SHIMEK et al)** in view of **GB002068106 (ROSIEK et al)** and **GB002035545 (PALAU)** and **FR002629178 (ARRIBAS)**, as applied to claims **55, 73** and **99** respectively above, and further in view of **US005046944 (SMITH)**.

GB002334328 (SHIMEK et al) show and discloses the invention substantially as set forth in the claims with possible exception to:

- forming a plurality of intercommunicating chamber portions by support fence or spacers sealed with a gasket in a groove in a lower face of a non-metallic ceramic burner body flat lower portion.

US005046944 (SMITH) teaches, from the same solid fuel effect gas fire field of endeavor as **GB002334328 (SHIMEK et al)**, forming a plurality of intercommunicating chamber portions (728), which may be independently feed by separate gas supplies (see figures 32 and 33), by support fence or spacers (734; see Figures 28-29) sealed with a gasket forming adhesive (736) in a groove (732) cut or moulded in a lower face of a non-metallic ceramic burner body flat lower portion (730).

In regard to claims **57, 76, 77** and **105**, for the purpose of controlling and distributing a fuel gas to desired portions of the burner body and for supporting and maintaining a space between the burner body and burner pan, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify **GB002334328 (SHIMEK et al)** to include a plurality of intercommunicating chamber portions, which may be independently feed by separate gas supplies, defined by support fences or spacers sealed with a gasket forming adhesive material in a groove formed in the lower face thereof and in the manner set forth in applicant's claims, in vie of the teaching of **US005046944 (SMITH)**.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned

with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims **46-146** are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims **1-32** of **U.S. Patent No. 6443726** in view of **GB002334328 (SHIMEK et al)** in view of **GB002068106 (ROSIEK et al)** and **GB002035545 (PALAU)** and **FR002629178 (ARRIBAS)**, and further in view of **US005941237 (SHIMEK et al)** or **US004726351 (WHITTAKER et al and US005046944 (SMITH))**.

To bring about shades of varying brightness as a result of the temperature difference in the burner for the purpose of producing the simulated realistic effect of a hot real fuel bed, it would have been obvious to a person having ordinary skill in the art at the time of applicant's invention to construct the non-metallic ceramic burner body upper portion of **U.S. Patent No. 6443726** to include a flat lower portion or bottom surface, distribution apertures positioned in a plurality of planes and spacing, a peak and trough contoured profile, and/or materials that glow at selected color variations, in view of the teachings of **GB002068106 (ROSIEK ET AL)**, **GB002035545 (PALAU)** or **FR002629178 (ARRIBAS)**. In order to provide a more realistic simulated flame it would have been obvious to modify the apertures of **U.S. Patent No. 6443726** to include a first set of apertures and a second set of apertures differently distributed along an H-shaped the gas supply manifold and to differ in number such that the flow rate of fuel flowing through respectively by the first set and second set of apertures would be different and any flame(s) produced by the first set of apertures would necessarily be characteristically different from any flame(s) produced by the second set of apertures, in view of the teaching of **GB002334328 (SHIMEK et al)**. For the purpose of further enhancing the decorative and aesthetic effect of the simulated burning log effect, it would have been obvious to a person having ordinary skill in the art to modify flame ports to of **U.S. Patent No. 6443726** to permit the flames to move along the contoured surface of the simulated fuel features, in view of the teaching of **FR002629178 (ARRIBAS)**. For the purpose of controlling and distributing a fuel gas to desired portions of the burner body and for supporting and maintaining a space between

the burner body and burner pan, it would have been obvious to a person having ordinary skill in the art at the time of the invention to modify **U.S. Patent No. 6443726** to include a plurality of intercommunicating chamber portions, which may be independently feed by separate gas supplies, defined by support fences or spacers sealed with a gasket forming adhesive material in a groove formed in the lower face thereof and in the manner set forth in applicant's claims, in view of the teaching of **US005046944 (SMITH)**. And, for the purpose of providing additional non-fuel mixed air supply to the flame area in order to aid in the formation of flickering or realistic looking flames, it would have been obvious to a person having ordinary skill in the art at the time of the claimed invention to modify the burner body of **U.S. Patent No. 6443726** to include air holes arranged in the manner set forth in applicant's claims, in view of the teaching of **US005941237 (SHIMEK et al)** or **US004726351 (WHITTAKER et al)**.

Conclusion

See the attached USPTO form 892 for prior art made of record and not relied upon which is considered pertinent to applicant's disclosure.

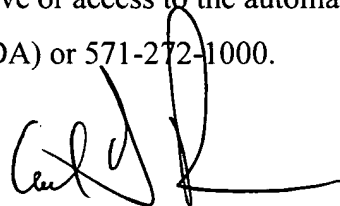
USPTO CUSTOMER CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARL D. PRICE whose telephone number is (571) 272-4880. The examiner can normally be reached on Monday through Friday between 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ehud Gartenberg can be reached on (571) 272-4828. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3749

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Carl D. Price', with a long horizontal stroke extending to the right.

CARL D. PRICE

Primary Examiner

Art Unit 3749

cp